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APPLICATION NO. FILING DATE		FI	FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	L	
10/076,951	02/15/2002		Larry L. Harris		011247.000003	CONFIRMATION NO.	
	90 . 05/18/2004			- ¥	EXAMINER		
PATENT PROS	& KNIGHT L.L.P. SECUTION DEPARTM	MENT			NGUYEN, VINH P		
98 SAN JACIN AUSTIN, TX	TO BLVD., SUITE 19 78701	00	*	,	ART UNIT	PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

DOTRE Action Summary			Application N	0.	Applicant(s)		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address — A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Editoration of the mamy be available under the provisions of 3 CFR 1.136(a). In one vents, however, may a reply be limited to the communication. If No period for reply is specifications in lass than thirty (30) stays, a reply within the setalitory ministration (30) stays will be considered timely. If NO period for reply is specifications in lass than thirty (30) stays, a reply within the set sciency. In NO Period for reply is specifications in the set in the replication of the set in the replication is replication of the set in the replication is non-final. Status 1) ☑ Responsive to communication(s) filed on 05 March 2004. 2a) ☐ This action is FINAL. 2b) ☑ This action is non-final. 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ☑ Claim(s) 1-36 is/are pending in the application: 4a) ☐ Claim(s) 1-36 is/are pending in the application: 4b) ☐ Claim(s) 1-15 and 23 is/are replication. 5c) ☑ Claim(s) 1-15 and 23 is/are replication. 4c) ☐ Claim(s) 25 is/are objected to be set in the application of Claims objected in the application of Claims of Claims of Claims objected to restriction and/or election requirement. Application Papers 9c) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. 10c) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. 11c) ☐ Acknowledgment is made of a claim f		Offic Action Summan	10/076,951		HARRIS, LARRY L.		
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Art Unit: 2829

1. In the previous office action mailed on 01/29/04, the species in paragraph 1 should be species of figure 4A, species of figure 5 and species of figure 6.

- 2. Applicant's election without traverse of species of figure 4A in Paper No. 0304 is acknowledged.
- Claims 21-22,25-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 0304.
- 4. Claims 2-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 2 and, it is unclear how and when the pilot channel is considered as AC coupled.

In claim 3, it is unclear how and when the data channel is considered as DC coupled.

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C: 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1-2 and 23 (insofar as understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Petersdorf (pat # 4,395,677).

As to claims 1 and 23, Petersdorf discloses in figure 1 an apparatus having a first hall effect element (H1) and a second Hall effect element (H2) connected to each other. It is noted that the term pilot channel, data channel, first AC coupled and DC coupled are not given any patentable weight since the significant functions of those channels are not recited in the scope of claim.

As to claim 2, it appears that one of the hall effect element is a AC coupled since the band pass filter (60) is used at the output of an instrumentation amplifier (54).

- 7. Claims 16-19 and 32-36 are allowable since the prior art does not disclose a voltage isolation buffer having an AC coupled Hall effect sensor, a DC coupled Hall effect sensor and means for calibration operatively coupled to the AC Hall effect sensor and the DC Hall effect sensor for receiving information from the AC hall effect sensor and for calibrating the DC hall effect sensor.
- 8. Claim 24 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not disclose "a means for calibration" coupled to the Dc coupled Hall effect sensor.

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gu (pat # 5,811,965) discloses DC and AC current sensor having a minor loop operated current transformer.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P NGUYEN whose telephone number is (521)272-1964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VINH P. NGUYEN PRIMARY EXAMINER ART UNIT 2829

04/29/04